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08/603.657	02/20/96	PANUCE	D

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E1M1/1030

EXAMINER	
SCOTT, J	
ART UNIT	PAPER NUMBER
2112	5

DATE MAILED: 10/30/96

Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents

# Office Action Summary

Application No.

08/603,657

Applicant(s)

DONALD G. PAUNCE

Examiner

J.R. Scott

Group Art Unit

2112



☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three (3) month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-13 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-13 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

(Subst. to 948)

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2112

## DETAILED ACTION

### *Drawings*

This application has been filed with informal drawings which are acceptable for examination purposes only. Note the enclosed substitute form PTO-948. No analysis has been made of the drawings at this time by the Draftsperson due to the informalities in the drawings. Formal drawings will be required when the application is allowed.

### *Claim Rejections - 35 USC § 112*

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 fails to clearly describe the movable and fixed contact structure. The claim further fails to state how the plurality of cams are operably connected to the moveable contacts. Noting the phraseology in its initial recitation in the claim, does applicant intend to refer to a plurality of electrical contact assemblies, each assembly including a movable contact and at least one fixed contact? Although the switch is referred to as an inverter bypass safety switch, it is not clearly understood how the switch functions as an inverter bypass safety switch.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by either Rasor et al or Moroishi. Note the rotary switch in figs. 15-25 of Rasor et al and figs. 1-9 of Moroishi.

Claims 1-3 are rejected under 35 U.S.C. 102 (b) as being clearly anticipated by Heng et al., Fujita, Alsch or Schaeffer.

### *Claim Rejections - 35 USC § 103*

**Art Unit: 2112**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alsch, Fujita, Heng et al, or Schaeffer considered with Arnold.

Fujita, Alsch, Heng et al and Schaeffer, each disclose the use of a spring biased movable bridging contact whose displacement from a normally closed position requires the use of a rotatable cam. In each instance contact points or the equivalent structure are mounted on either end of the movable bridging contact. Fujita, Alsch, Heng et al and Schaeffer, each lack the teaching of using contact points constructed of silver cadmium oxide. Arnold discloses that it is known in the switch contact and switch arts to provide a movable bridging contact with silver cadmium oxide contact points noting Arnold at 105 and also column 6, lines 45-47. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the Alsch, Heng et al, Schaeffer or Fujita movable bridging contacts with contact points made of silver cadmium oxide as suggested by Arnold, in order to use a preferred contact material which is economical to manufacture thereby reducing contact materials costs in the production of a switch.

Claims 5,6,7,8,10,11,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heng et al, singly or optionally considered with Rasor et al or Moroishi.

**Claim 5**

Heng et al discloses the claimed device except for the use of a cylindrical housing or contact block for containing a plurality of like cylindrical sections which in turn contain plural cam operated switch assemblies. The Heng et al housing sections, noting figure 6, are substantially square in nature. Official notice is taken of the fact that cylindrical type housings

**Art Unit: 2112**

or sections may be used in lieu of the Heng et al square shaped housings or sections 1 since the square and circular shapes are well known switch housing configurations used in multiple switch assemblies enclosing a plurality of sections or housings mounted in tandem with respect to one another.

Claim 6

A handle is essential for operation of the Heng et al shaft if the shaft is manually operated. The use of an operator or handle on a rotatable cam operated switch is found at 38 in figure 1 of Moroishi or knob 225" noting fig. 15 of Rasor et al. Use of the Moroishi or the Rasor et al manual operator with the Heng et al rotatable cam shaft would constitute the obvious use of well known parts in the rotatable cam operated switch arts.

Claim 7

The detent structure in fig. 9 constitutes the means for locking the Heng et al shaft 4 in a desired position.

Claim 8

Official notice is taken of the fact that if a pair of movable and stationary contacts weld together in the Heng et al switch assembly, since the movable and fixed contacts are normally located in a closed position, and if welded, the shaft would not be able to rotate due to the malfunctioning a of a particular contact switch arrangement.

Claims 10-12

Since the Heng et al switch is of general utility and the terminals are provided outside the housing for electrical connection to electrical leads associated with miscellaneous electrical equipment, it is prima facie obvious that the switch is adapted for connection to such components as a motor, motor starter, fuseblock or a disconnect switch.

Claim 13

Since the Heng et al switch includes a detent mechanism with at least four distinct switching positions, it is prima facie obvious that the Heng et al switch is designed for

Art Unit: 2112

controlling at least four different electrical operation functions and do not preclude the four functions or patterns disclosed in claim 13 including a DRIVE, LINE, OFF AND TEST functions or patterns.

Claim 9

The Heng switch arrangement is enclosed in a non-metallic enclosure consisting of the non-metallic sections containing the movable and fixed contacts located in the cavities of each of the non-metallic sections 10.

**Cited References**

Schaelchlin et al. Spear et al., Newton, Wiktor, Kovatch et al., Kruger, Schell et al., Iverson et al., Thomson, Minoura et al., Bassett et al., Spanio (366), (517) and (369), Smith et al. (367) and (586) constitute prior art cited by the applicant related to inverter switch arrangements including specific circuitry and switch structure.

**Summary**

Claims 1-13 are rejected.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to J.R.Scott whose telephone number is (703) 308-2013.

The fax phone number for this Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782.

JRSCOTT:jrs

October 28, 1996

  
J. R. SCOTT  
PRIMARY EXAMINER  
ART UNIT 2112